

PHOTOGRAPHY

FAQ

Q What is face detection; is it worth paying extra?

A Most photos are of people, and in these shots, their faces are the most important part of the image. Face detection uses digital processing to find faces in a composition, which are used as the basis for focus and, usually, exposure settings.

Some face-detection systems are faster and more reliable than others, but all those we've seen require people to be facing the camera head-on in order to work. We've found they don't cause dramatic improvements in picture quality, but they do reduce the chance of dud shots, particularly if shooting against a bright or dark background or when photographing groups of people where the background falls in the centre of the frame.

Keen photographers probably don't need this assistance, but the better systems should serve casual snappers well.

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PENTAX K100D with 18-55mm lens

★★★★★

£400 inc VAT

Pentax may not be the most popular camera manufacturer, but the K100D is likely to raise its profile. It's a 6-megapixel camera that has much in common with Nikon's D40 (reviewed right). The key difference is that the K100D includes optical image stabilisation built into its sensor. Pentax also makes the K110D, which is the same camera minus the stabilisation and costs £376 including VAT.

The plastic body seems reasonably tough, but this isn't the prettiest camera we've seen. It rattles slightly and its autofocus motor and shutter are noisy. It's powered by four AA batteries, which we find clumsy compared to a lithium-ion (li-ion) battery.

Battery life is decent, but the total of 778 shots we measured is slightly misleading. We normally test with the screen constantly illuminated, but the K100D doesn't have such a mode. Then again, it doesn't need one: Pentax is one of very few digital SLR manufacturers still to include a passive LCD screen on its entry-level model. This displays key settings, while more detailed information is available on the 2½in 210,000-pixel LCD with a push of the Info button. There are few other

single-function buttons, but a Function button switches the navigation pad for quick access to drive mode, white balance, ISO and flash settings.

The menu includes a wide range of other options, including exposure bracketing and the ability to lock exposure metering to the autofocus point. As with Nikon's D40, it's possible to set the ISO range in Auto ISO mode, although the ISO speed is raised when the shutter speed hits



1/50 seconds, which is rather conservative considering that image stabilisation is built in. Auto ISO stopped functioning when we adjusted the exposure compensation control.

Performance was the biggest disappointment. The autofocus was reliable but slow, and shutter lag was significantly longer than with the D40. In continuous mode, it managed five shots at around 2.5fps, but then fell to 1.2fps, despite using a fast SD card.

Image quality was excellent, but not without its problems. Images were seriously sharp and detailed with minimal noise, giving perfectly usable results at ISO 1,600. However, while the K100D and the D40 were hard to tell apart in these respects, the D40 nudged into the lead in most of our tests. For colour accuracy, the results were more conclusive.

The K100D's colours were mostly excellent, but exposures weren't as flattering as from the D40 and the automatic white balance coped badly in anything but natural light.

If the D40 didn't exist, the K100D would get a five-star rating. Both cameras' flaws are forgivable considering their low prices, but we prefer Nikon's superior performance and image quality to the K100D's better controls and image stabilisation.

Ben Pitt

SUMMARY

- ✓ Comprehensive controls
- ✓ Image stabilisation
- ✗ Relatively slow

DIGITAL CAMERA 6 megapixels (3,008x2,000), 18-55mm lens (27-82mm equivalent), SD slot (none supplied), 4x AA batteries
PART CODE 1901600
SUPPLIER www.jessops.com
DETAILS www.pentax.co.uk

PERFORMANCE (see page 54)



Also consider...

FUJIFILM FinePix F20 Zoom

★★★★★

£120 inc VAT



The FinePix F20 Zoom is a classy point-and-shoot camera that specialises in low-light photography. It produced excellent results at its ISO 400 setting, although shots were more varied at ISO 800 and above. Performance was also up to scratch, with just two seconds between shots. Most importantly, image quality was excellent, making this camera brilliant value.



DIGITAL CAMERA 6.1 megapixels (2,848x2,136), 3x optical zoom (35-108mm), xD slot (10MB internal), li-ion battery
PART CODE N0077830A
SUPPLIER www.amazon.co.uk
DETAILS www.fujifilm.co.uk
 ✓ Superb image quality
 ✗ Varying quality at high ISO settings
FULL REVIEW Feb 2007



CANON EOS 400D

★★★★★

£466 inc VAT



The successor to the hugely popular EOS 350D, Canon's EOS 400D is the best affordable digital SLR camera on the market. Incredibly fast focusing, a high capture rate and brilliant image quality from the 10.1-megapixel sensor all make it really hard not to love this camera. For photography enthusiasts who want to upgrade from a film SLR or compact camera, this is undoubtedly the model to get.



DIGITAL CAMERA 10.1 megapixels (3,888x2,592), 3x optical zoom (18-55mm), CompactFlash slot, li-ion battery
PART CODE 1237 B009AA
SUPPLIER www.onestop-digital.com
DETAILS www.canon.co.uk
 ✓ Fantastic image quality
 ✗ Finite continuous mode
FULL REVIEW Feb 2007



NIKON

D40 with 18-55mm lens

★★★★★

£378 inc VAT

Nikon's D50 was a groundbreaking camera. At around £600 including VAT at its launch in late 2005, it was the most affordable digital SLR to date, but it still managed to provide excellent performance, handling and image quality. Now, 18 months on, its successor is here, but its name – and price – suggest that the D40 is a cut-down version of the D50. The resolution is still six megapixels, and a few features have regressed or disappeared. Still, other features have improved, so it's not accurate to think of the D40 as inferior to the D50.

This camera is more compact and lighter than its predecessor, weighing 522g including its li-ion battery. Unfortunately, the D50's passive LCD for displaying camera settings is gone; instead, the settings appear on the main LCD screen, although they're also visible through the optical viewfinder.

The screen is bigger and more detailed than before at 2½in and 230,000 pixels, and brims with information and fun graphics. It offers advice such as "Subject too dark", while a dedicated Help button provides suggestions as to what to do about it, as well as various other tips.

Another two buttons activate and switch views on the screen, but gone are the D50's dedicated buttons for ISO speed, white balance preset and resolution. A drive mode button can be reconfigured to several other uses, but regular menu delving is

inevitable. This is disappointing on a digital SLR camera, regardless of its target audience.

Nikon has dispensed with the internal focus drive motor, which means autofocus isn't available when using Type G or Type D AF lenses. AF-I and AF-S lenses (such as the 18-55mm kit lens) have their own focus drive motors, so this shouldn't present a problem unless you already have a Nikon lens you want to continue using. Auto-bracketing is also missing, which will bother some, and its absence seems harsh considering that it wouldn't cost anything to include. The D50's five-point autofocus sensor has been replaced by a three-point sensor, but it's still quick to lock on to its subject. However, as with the D50, it sometimes fails to focus at all.

Our favourite new feature is the configurable automatic ISO setting, taken from the more upmarket D80. The user sets a maximum shutter speed and ISO speed and the camera adjusts exposure settings accordingly, depending on the available light. It's an excellent system that closely mimics the decisions photographers make when manually adjusting settings, so being able to program these preferences into the camera is a superb timesaver.

Other differences between the two cameras are subtle but favourable.



SDHC cards are now supported for capacities over 2GB. The 2½fps continuous mode remains, but now continues until the card is full. The D50's image quality didn't come in for much criticism, but the D40's is marginally better, with more detail than we've ever seen from a 6-megapixel camera and more than most 8- and 10-megapixel compacts manage. Noise is barely perceptible at ISO 800, while a new ISO 3,200 setting gives remarkably decent results. Colour accuracy was consistently excellent across our tests, demonstrating clear superiority to Pentax's K100D, reviewed opposite.

Despite some beginner-friendly flourishes, the D40 isn't quite as easy to use as the D50. However, it's not seriously compromised in this respect, and improvements to image quality and performance are just as significant. Ultimately, it's an excellent camera and, at £378, great value. As we go to press, Canon's ageing but marginally superior EOS 350D is available for £400, so we recommend this over the D40 while stocks last. However, temporary bargains aside, the D40 is an excellent choice for budding photography enthusiasts who can't quite stretch to Canon's EOS 400D (see 'Also consider...' below).

Ben Pitt

SUMMARY

- ✓ Fantastic image quality
- ✓ Fast performance
- ✗ Few dedicated physical controls

DIGITAL CAMERA 6 megapixels (3,008x2,000), 18-55mm lens (27-82mm equivalent), SD slot (none supplied), li-ion battery
PART CODE VBA150KU01
SUPPLIER www.rankhour.com
DETAILS www.nikon.co.uk

PERFORMANCE (see page 54)

PANASONIC
Lumix DMC-FZ50

★★★★★

£330 inc VAT

PRICE CUT!



Panasonic's Lumix DMC-FZ50 gives almost digital SLR performance on a much lower budget. The huge 12x optical stabilised zoom lens and 10-megapixel CCD allow you to get close to the action. Image quality is excellent at low ISO settings, but ISO 400 or higher produces grainy images. It's the best super-zoom digital camera on the market.



DIGITAL CAMERA 10 megapixels (3,648x2,736), 12x optical zoom (35-420mm), SD slot (32MB card supplied), li-ion battery
PART CODE PANLUMFZ50

SUPPLIER www.onestop-digital.com
DETAILS www.panasonic.co.uk

- ✓ Fantastic handling; beautiful pictures in well-lit conditions
- ✗ Image quality slumps as ISO setting rises

FULL REVIEW Jan 2007

NIKON
Coolpix L4

★★★★★

£104 inc VAT

One of the lowest-priced digital cameras around, Nikon's Coolpix L4 is surprisingly good. The 4-megapixel sensor might seem a little low, but it's good enough for prints at 5x7in. Image quality is excellent, comparing well with that of cameras costing three times as much. If you're on a very tight budget, the Coolpix L4 is an excellent choice.



DIGITAL CAMERA 4 megapixels (2,272x1,704 pixels), 3x optical zoom, 10MB internal memory, SD slot, 2x AA batteries
PART CODE VVA640E6
SUPPLIER www.pixmania.co.uk
DETAILS www.nikon.co.uk

- ✓ Excellent image quality; excellent value
- ✗ Slow, especially in low light

FULL REVIEW Dec 2006

CASIO
Exilim Zoom EX-Z850

★★★★★

£200 inc VAT

An 8-megapixel sensor, 2½in screen and a mind-boggling array of features make the Exilim Zoom EX-Z850 an attractive compact camera. It's quick to take pictures, and the battery life of 551 shots from a single charge is the best we've seen from a compact camera. Only aggressive noise reduction in indoor scenes prevented it getting top marks.



DIGITAL CAMERA 8 megapixels (3,264x2,448 pixels), 3x optical zoom, 8MB internal memory, SD slot, li-ion battery
PART CODE 30041976
SUPPLIER www.techstone.co.uk
DETAILS www.casio.co.uk

- ✓ Packed with features
- ✗ Loss of detail at high ISO settings

FULL REVIEW Jan 2007



CANON Digital Ixus i7 Zoom

★★★★
£170 inc VAT

The Ixus i7 exudes a refined elegance that suggests Canon has female shoppers in its sights. We love the brown and gold colour scheme; it's also available in silver, pink or blue. It's one of the lightest and smallest cameras we've seen, but this means there's only room for a 2.4x zoom lens and a 1.8in screen. The lens's macro mode is disappointing, with a minimum focusing distance of 30cm.

There aren't many buttons on the back of the camera, with no dedicated control for zooming. The up and down navigation buttons act as zoom controls, but the down button also serves as the delete button. When we took a picture and then quickly zoomed out, the camera thought that we wanted to delete the previous picture.

With Canon's new Digidig III processor included, performance is excellent, with a 1.5-second startup time, 1.7 seconds between shots and a 1.6fps continuous mode. Autofocus is fast, too, and benefits from face detection. Battery life is disappointing, though, especially considering



that the small screen drains less power than 2½in screens.

We struggled to reach a conclusion about the i7's image quality, so the best we can say is that it's variable. It often produced sharp images, but unreliable auto-focus and excessively long shutter speeds in low light caused many shots to lack detail. Still, if the camera automatically increased its ISO speed in low light, we would have criticised the unacceptably high noise levels; ISO 400 gave poor results and the top ISO 1,600 setting is pointless. Colours were above average, though, tending towards punchy, flattering tones.

Image-quality niggles and the basic lens mean this isn't a camera for photography enthusiasts. It's a decent choice if style and compactness are prime concerns, but Panasonic's DMC-FX3 (reviewed below) isn't much bigger and offers far superior image quality.

Ben Pitt

SUMMARY

- ✓ Attractive, compact design
- ✓ Fast performance
- ✗ Variable image quality

DIGITAL CAMERA 7.1 megapixels (3,072x2,304), 2.4x optical zoom (38-90mm), SD slot (16MB supplied), li-ion battery
PART CODE 1277B005
SUPPLIER www.rankhour.com
DETAILS www.canon.co.uk

PERFORMANCE (see page 54)



PANASONIC Lumix DMC-FX3

★★★★★
£130 inc VAT

In *What's New, Shopper* January 2006 we were quite taken by Panasonic's DMC-FX9, but put off by its price of £300. The FX3 reviewed here is similar to the FX9 in looks and specifications, so it's satisfying to find it available online for as little as £130. It's not often we see such an elegant camera at this price, especially considering that Panasonic's excellent optical image stabilisation is included to counteract blur from camera shake.

Low-cost cameras are often slow, but the FX3 is reasonably nippy at 2½ seconds to shoot from startup and two seconds between shots. The 1.2fps continuous mode is better than average, but the camera is sluggish when browsing photos. The FX3 has a 2½in screen, and although its 115,000-pixel resolution is disappointing, we're willing to forgive it at this price.

The controls are well laid out, but their etched labels can be hard to read in low light. The simple list-style menu includes options such as aspect ratio and maximum shutter speed, allowing you to decide the steadiness of your hand.



Image quality is this camera's strongest asset. Photos were exceptionally detailed with lifelike colours in a range of conditions. High-contrast scenes were particularly impressive, with subtle details captured in bright and dark areas. Our only criticism is that noise-reduction processing sacrificed detail in complex textures during low-light photography, although the top ISO 400 setting remained usable.

The price is fantastic for such a high-quality camera with optical image stabilisation. However, stiff competition comes from FujiFilm's FinePix F20 (see 'Also consider...'), which lacks stabilisation but offers cleaner, sharper, high-ISO performance. Ultimately, we find the F20's high-ISO performance more valuable than the FX3's stabilisation.

Ben Pitt

SUMMARY

- ✓ Excellent images in most conditions
- ✓ Much more affordable than it looks
- ✗ Image quality deteriorates in low light

DIGITAL CAMERA 6 megapixels (2,816x2,112), 3x optical zoom (35-105mm), SD slot (13.5MB internal), li-ion battery
PART CODE DMC-FX3EBS
SUPPLIER www.empiredirect.co.uk
DETAILS www.panasonic.co.uk

PERFORMANCE (see page 54)



CHOOSING AN... Ultra-Zoom Camera

Follow the steps to your ideal specs

RESOLUTION: 6 megapixels
ZOOM: 6x optical (35-210mm), no stabilisation
MONITORING: 2in, 115,000-pixel LCD screen
EXPOSURE MODES: Auto
SUPPLIED MEMORY: 10MB internal
BATTERIES: 2x AA disposable

Recommended minimum in grey

1 An ultra-zoom camera gives you more freedom to frame your photos in interesting ways, allowing you to shoot faraway or small subjects or zoom in on a particular area of a scene. A camera with the specifications shown above in grey is essentially a standard compact camera with a larger zoom than normal, but ultra-zoom cameras often come with other advanced features for creative photography.

2 Now six megapixels is an entry-level specification, resolution is fairly irrelevant. We've seen 6-megapixel cameras that capture more detail than 10-megapixel cameras. If you want to print enlargements, read our reviews to find out how much detail a camera is capable of providing.

3 A 6x zoom isn't bad, but many cameras offer 10x or 12x. However, while higher zoom settings magnify the image, they also magnify blur caused by camera shake, so optical image stabilisation is particularly useful for steadying shots. Most zooms start at a 35mm focal length, but lower values allow for wide-angle photography.

4 LCD screens of 2½in and larger are a treat to use, but they don't always offer more detail. Only the best ones have resolutions of 200,000 or more pixels. Many ultra-zoom cameras also include an electronic viewfinder (EVF), which is an additional LCD screen in lieu of an optical viewfinder.

5 Creative photographers should try to look out for aperture priority, shutter priority and manual exposure modes, and manual focus. High ISO speeds can be useful for low-light handheld photography, but only if reasonable image quality is maintained.

6 Bundled memory is always inadequate, so budget £15 for a 1GB memory card, and another £15 if the camera doesn't include rechargeable batteries.